

**Environmental Assessment  
Emergency Temporary Housing  
Hurricanes Katrina and Rita  
FEMA-1603-DR-LA, FEMA 1607-DR-LA  
Port of Lake Charles Industrial Property Emergency Temporary Housing Site  
Lake Charles, Calcasieu Parish**

**A. Introduction**

Hurricane Katrina, a Category 4 hurricane with a storm surge above normal high-tide levels, moved across the Louisiana, Mississippi, and Alabama gulf coasts on August 29, 2005. Maximum sustained winds at landfall were estimated at 140 miles per hour. On September 24, 2005 Hurricane Rita made landfall just east of Sabine Pass, Texas, near the Louisiana border. The storm was a Category 3 hurricane with sustained winds in excess of 120 mph.

President Bush declared a major disaster for Louisiana due to damages from Hurricane Katrina, and signed a disaster declaration (FEMA-1603-DR-LA) on August 29, 2005, authorizing the Federal Emergency Management Agency (FEMA) to provide federal assistance in designated areas of Louisiana. A second Presidential disaster declaration in response to damages from Hurricane Rita was declared on September 24, 2005. FEMA proposes to administer this federal disaster assistance per the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 USC 5121-5206, as amended (Stafford Act). Section 408 of the Stafford Act authorizes FEMA's Individual Assistance Program to provide emergency temporary housing for disaster victims whose homes are uninhabitable.

This Environmental Assessment (EA) was prepared in accordance with the national Environmental Policy Act of 1969 (NEPA), the President's Council on Environmental Quality (CEQ) regulations implementing NEPA (40 CFR 1500-1800), and FEMA's regulations implementing NEPA (44 CFR 10.9). The purpose of this EA is to analyze potential impacts of temporary and transient emergency group housing for disaster victims as part of an expedited review process. FEMA will use the findings in this EA to determine whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

**B. Purpose and Need:**

Catastrophic damage from Hurricane Katrina and subsequently, Hurricane Rita has resulted in an extraordinary demand for housing assistance. To date in Calcasieu Parish, approximately 109,000 requests for Federal assistance have been received. Of these requests, approximately 72,000 have been received from residents of the City of Lake Charles. The majority of these requests are for funds for repairs, rental assistance, and temporary housing. The purpose of this action is to help satisfy some of the housing demand.

### **C. Environmental Review Process:**

In order to meet the urgent needs of disaster victims in need of temporary housing, FEMA has implemented an expedited environmental review process. The purpose of this document is to assist FEMA in fulfilling its environmental review responsibilities under NEPA and serve as a vehicle to document compliance under other applicable environmental laws. Laws and Executive Orders addressed through this EA include: the Clean Air Act, Clean Water Act, Endangered Species Act, National Historic Preservation Act, Executive Order 11988 (Floodplain Management), Executive Order 11990 (Protection of Wetlands), Executive Order 12898 (Environmental Justice), and Farmland Protection Policy Act. Expedited agency consultation consisted of establishing a programmatic agreement with the Louisiana State Historic Preservation Office and an expedited review process with the U.S. Fish and Wildlife Service. Other resource areas or issues evaluated in this EA include noise, visual resources, traffic, socioeconomics, safety and security, and hazardous and toxic waste.

The scope of FEMA's environmental review includes evaluating project alternatives, characterizing the affected environment, identifying potential environmental impacts, and outlining ways to reduce or minimize adverse affects. This EA examines the site-specific environmental impacts associated with building a proposed FEMA group housing park on land to be leased by the General Services Administration for this purpose.

This EA was prepared based on a site evaluation conducted on October 29, 2005, document research, and agency information. An electronic version of the Draft EA will be provided to interested agencies prior to and during the public comment period. The public participation period will be brief, as necessitated by the emergency circumstances. Agency coordination and consultation will be deemed complete at the end of the public comment period. FEMA believes that this process will allow for sufficient action analysis and meet the goal of providing timely federal assistance to disaster victims.

### **D. Site Selection and Alternatives Analysis:**

NEPA requires investigation and evaluation of reasonable project alternatives as part of the project environmental review process. Federally assisted housing options, including hotel/rental assistance and locating a travel trailer or mobile home on a private site or in an existing park, are being exhausted first for those requesting housing assistance in Calcasieu Parish. Accordingly, a remaining alternative is to build a group housing site where the above options do not satisfy the demand. In order to expedite the site selection process, FEMA's contractors initially review available aerial photos and maps, conduct site reconnaissance field surveys, and contact state and local officials to identify potential sites. Factors considered in choosing a site include: demand for temporary housing in that area, site topography, property owner willingness, cost, past land use, if it is already planned for development, access to existing utilities, engineering feasibility, and

environmental/cultural resource sensitivities. FEMA continues to evaluate alternative sites in Calcasieu Parish, and other parishes within southwest Louisiana. Although various alternatives have been and continue to be identified, the extraordinary amount of needed housing have limited this EA to analysis of one suitable site alternative at this time. The Port of Lake Charles Industrial Park Property site was selected for further analysis because it meets specific site selection criteria.

**E. Project Location:**

The proposed site, known as the Port of Lake Charles Industrial Park Property, is located adjacent to and west of Louisiana Highway 397 in the City of Lake Charles. The site is bordered by Swift Road to the north, an undeveloped forested area to the south, Highway 397 to the east, and James Suddreth Parkway to the west. The site is located in the Lake Charles Industrial Park and Chenault Industrial Airport is approximately 1-mile due south (Figures 1 and 2)(Lat/Long N30.2349/W93.1629).

**F. Site Description:**

The site consists of approximately 55 acres of land located within the Lake Charles Industrial Park. The site is currently a large undeveloped, grassed field being used as pasture land for cattle and horses (Figure 3). The construction entrance will be located off James Suddreth Parkway, while the entrance for the Park will be off Highway 397. Land use through out the area is consistent with industrial park designation. Texas Eastern Company lies to the north and Spartech Polycom Industry lies to the west. Directly across Highway 397 (east) from the proposed site is a residential area containing mostly mobile homes.

**G. Project Description:**

The project description is based on preliminary site design completed on November 12, 2005 (Fluor 2005).

The proposed action would involve the construction of a mobile home/travel trailer park (hereafter “the Park”) which would accommodate approximately 300 mobile homes and 200 travel trailers (Figure 4). At this time, occupancy is not expected to exceed 18 months. In a letter dated October 26, 2005, the Parish President indicated that a mobile home park is compatible with the current zoning for the property.

Based on the site design (Fluor 2005), the following features would be included with this temporary housing site:

- Potable water for this site will be connected to the local underground water main in the right-of-way located along James Suddreth Parkway. Sufficient mains sized to provide adequate fire flow are assumed to pre-exist. New lines and hydrants will be installed on the property for all trailers.

- Sanitary sewerage from this site will be collected in an underground gravity sewer system which will tie into existing gravity sanitary sewer system on the west side of the site.
- Storm water drainage will be sloped to adjacent drainage ditches to provide positive drainage within the site.
- On-site roads will be gravel surface with paved parking sections only for access to designated ADA (Americans with Disabilities Act) homes. The main entrance onto Louisiana Highway 397 and the secondary entrance onto James Suddreth Parkway will also be paved.
- Recreational facilities include but are limited to, picnic tables, playground equipment, ball fields, and open green spaces for general play areas.
- The existing trees and shrubs within the site and along the perimeter would be cleared and grubbed.
- A safety fence would be installed and maintained around the Park perimeter.

When the temporary housing need has ended, FEMA expects that the mobile homes would be transported from the site to suitable locations elsewhere (to be determined on a case-by-case basis). The Park would then be seeded and restored to previous conditions and/or used by the landowner in a manner consistent with the parish zoning classification.

## **H. Affected Environment and Environmental Consequences**

Table 1 summarizes the results of the environmental review process. Potential environmental impacts that were found to be negligible are not evaluated further. Resource areas that have the potential for impacts of minor, moderate, or major intensity are further developed in the following Section I. Definitions of the impact intensity are described below:

**Negligible:** The resource area (e.g., geology) would not be affected, or changes would be either non-detectable or if detected, would have effects that would be slight and local. Impacts would be well below regulatory standards, as applicable.

**Minor:** Changes to the resource would be measurable, although the changes would be small and localized. Impacts would be within or below regulatory standards, as applicable. Mitigation measures would reduce any potential adverse effects.

**Moderate:** Changes to the resource would be measurable and have both localized and regional scale impacts. Impacts would be within or below regulatory standards, but historical conditions are being altered on a short-term basis. Mitigation measures would be necessary and the measures would reduce any potential adverse effects.

**Major:** Changes would be readily measurable and would have substantial consequences on a local and regional level. Impacts would exceed regulatory standards. Mitigation measures to offset the adverse effects would be required to reduce impacts, though long-term changes to the resource would be expected.

Table 1. Affected Environment and Environmental Consequences Matrix

Resource Area	Impact Intensity				Impact Summary	Agency Coordination / Permits	Mitigation
	Negligible	Minor	Moderate	Major			
Geology and Soils	X				Potential for localized increase in soil erosion during construction.	LAPDES stormwater construction permit to be obtained by construction contractor.	Implement construction BMPs, install silt fences/straw bales to reduce sedimentation. Area soils would be wetted during construction to minimize wind erosion. If fill is stored on site, the contractor would be required to cover it appropriately.
Hydrology and Floodplains (Executive Order 11988)	X				Project area is not located in a 100-year floodplain per the FEMA Flood Insurance Rate Map (Panel 220037 0400D) (FEMA 1998). No impacts anticipated.		
Wetlands (Executive Order 11990)	X				No wetlands were observed at the project site during the site reconnaissance. The area is not mapped on USFWS National Wetland Inventory (NWI) maps.		
Coastal Zone Management	X				Project site is located within the boundaries of the Coastal Zone. No impacts to the Louisiana Coastal Zone.	Coordination with Department of Natural Resources (DNR), 10/28/05	Joint Permit not required as the project would not involve any wetlands and is well above any tidal influence. Project would be compatible with the general consistency authorization agreement. No further consultation with DNR required.
Water Quality		X			Potential for localized increase in sedimentation during construction. Additional runoff during storm events will be directed to storm drains located on the north side of the site adjacent to Swift Road. Also see Section I.	LAPDES stormwater construction permits to be obtained by construction contractor.	Contractor to implement appropriate requirements in compliance with State standards. Implement construction BMPs and installation of silt fences/straw bales to reduce sedimentation. Also see Section I.

Resource Area	Impact Intensity				Impact Summary	Agency Coordination / Permits	Mitigation
	Negligible	Minor	Moderate	Major			
Air Quality	X				Parish is in attainment for criteria pollutants per the Clean Air Act. Negligible impact would be anticipated from vehicle exhaust emissions and increased dust during construction.		Area soils would be covered and/or wetted during construction to minimize dust. Rock cover for roads and housing pads would be wetted and/or treated periodically with a commercially available product approved for use in residential areas to minimize dust particles.
Vegetation and Wildlife		X			Site is currently a grassed pasture suitable for use by fringe species. Also see Section I.		See Section I.
Threatened and Endangered Species (Endangered Species Act Section 7)	X				Two species are listed as Endangered or Threatened in Calcasieu Parish. However neither species nor appropriate habitat is located within the project study area.	USFWS concurs that the proposed action will have no effect on Federal trust resources in a letter dated November 15, 2005.	
Cultural Resources (National Historic Preservation Act Section 106)		X			Based on background research and expected subsoil disturbance during placement of underground utilities, there is a reasonable potential for archeological deposits to be present.	Consultation letter to LA SHPO initiated 11/15/05	Archeological monitor to be present during subsurface excavation site work. Also see Section I.
Socioeconomics					Park occupancy is expected to be about 1,250 people (500 units x estimated 2.5 people per unit). The local community would experience an increase in the need for public services, such as schools, fire, police, and medical care for Park residents who are displaced from other communities. Commercial facilities, such as grocery stores, would also experience an increase in customers during Park occupancy. Also see Section I.	In a letter dated October 26, 2005, the Parish indicated the property has been reviewed in consideration of safety, security, and environmental issues.	See Section I.

Resource Area	Impact Intensity				Impact Summary	Agency Coordination / Permits	Mitigation
	Negligible	Minor	Moderate	Major			
Environmental Justice (Executive Order 12898)	X				The proposed action is not expected to pose disproportionately high and adverse public health or environmental effects on minority and low-income populations. Also see Section I.		See Section I.
Noise	X				During the construction period, residents immediately adjacent to the project site would experience an increase in noise levels. The vehicles from Park occupants would also increase the level of vehicular noise in the area.		If necessary, the following noise reduction measures should be considered: (1) restricting the 24-hour schedule to the first two weeks of construction; (2) using a 7 A.M. to 7 P.M. construction schedule; (3) completing construction closest to adjoining residents first; and (4) completing noisier activities during the day if a 24-hour schedule is used.
Safety and Security	X				No impact anticipated.		The contractor would place fencing around the site perimeter to protect residents from trespassers and provide a barrier to the adjacent railroad spur. The contractor would post appropriate signage and fencing to minimize potential adverse public safety concerns. Appropriate signage and barriers should be in place prior to construction activities in order to alert pedestrians and motorists of project activities and traffic pattern changes.
Hazardous Materials and Toxic Wastes					A search of hazardous materials databases was completed on 11/04/05. The approximate 50-acre parcel identified for the Park does not have any registered generators or incidents; however, adjacent facilities have been identified as generators. In addition a CERCLIS site is located approximately 0.5-mile from the Park, which is an abandoned oil reclamation facility. Assume adjacent facilities handle wastes appropriately – no issues on the park site.	LADEQ was contacted on November 15, final determination is pending.	



Resource Area	Impact Intensity				Impact Summary	Agency Coordination / Permits	Mitigation
	Negligible	Minor	Moderate	Major			
Traffic and Transportation	X				Traffic volumes on Highway 397 and local roads will increase. The existing infrastructure would be able to accommodate these increases without impacting local traffic.	In a letter dated October 26, 2005, the Parish indicated the property has been reviewed in consideration of safety, security, and environmental issues.	

## **I. Additional Impact Analysis**

### Water Quality

The project site is located in the Lower Calcasieu watershed that drains into the Atlantic Ocean. The Lower Calcasieu watershed has several water bodies that have exceeded the total maximum daily load (TMDL) for a number of criteria pollutants, in particular, nutrients, mercury, oil and grease, organic enrichment, and siltation. Five large quantity generators are registered in the watershed and 14 facilities are permitted to discharge to waters of the US. Sanitary sewerage from this site will be collected in an underground gravity sewer system with will tie into the existing gravity sewer system. The approximate discharge from the Park is expected as 115,000 gallons per day (gpd).

### Vegetation and Wildlife

The project site is approximately 50 acres of grassed pasture comprised of various grasses and forbs (Figure 4). The site would be prepared by mowing and grubbing the vegetation and grading the site. The interior roads and trailer pads would be covered with geotextile grade fabric and limestone rock. The remaining disturbed areas would be seeded following site grading activities. Typically wildlife in the project area consists of small mammals, reptiles, amphibians, and songbirds. Individuals would be expected to relocate to nearby areas until the action has ended. When the need for temporary housing has ended, the site would be seeded and restored to previous conditions and/or used by the landowner in a manner consistent with parish zoning classification.

### Socioeconomics

The project site is located in the City of Lake Charles, which has about 71,000 residents, and about 31,000 housing units. The median household income is estimated at about \$30,774 (based on 2000 Census). The primary employment sectors (about 75 percent of all jobs) are management and professional, sales, and service industry. Approximately 16 percent of local families live below the poverty level.

With the establishment of the Park, up to about 1,250 residents would be temporarily relocating to the Lake Charles Industrial Park area, although some of these potential residents may be residents of the area currently displaced from their homes. The local community is aware of this action and would experience an increase in the need for public services, such as schools, fire and police services, child care, and medical services. In a letter dated October 26, 2005, the Parish President indicated that the property has been reviewed in consideration of safety, security, and environmental and the Parish supports the use of this site for temporary housing.

In a meeting held on November 14, 2005, representatives from the City of Lake Charles, Calcasieu Parish, LADOT, U.S. Postal Service, FEMA, and their contractor, Fluor, met to discuss needed services for the proposed 500-unit facility. A list of needs was created from the meeting and will be reviewed with the Lake Charles FEMA representative to determine appropriate course of action.

**Environmental Justice**

Executive Order (EO) 12898 requires that each Federal agency identify and address the effects of its programs, policies, and activities on minority and low-income populations. The function of the EO is to avoid disproportionately high and adverse public health or environmental impacts to the target populations. Further, EO 12898 also tasks Federal agencies to ensure that public notifications regarding environmental issues are concise, understandable, and readily accessible.

Within the Lake Charles census-designated place (CDP), the population is about 47 percent African American, and 50 percent Caucasian. Approximately 16 percent of families and 20 percent of individuals are living below the poverty level. In comparison to Calcasieu Parish and Louisiana, the Lake Charles area has a higher percentage of minority residents and families below poverty (Table 2) (Census 2005).

**Table 2: Minority and Low Income Populations Summary Statistics**

<b>Subject</b>	<b>City of Lake Charles</b>	<b>Calcasieu Parish</b>	<b>Louisiana</b>
Demographics			
Caucasian	50%	73%	64%
African American	47%	24%	33%
Other (non-white)	3%	3%	3%
Families below poverty	16%	14%	15%

Source: U.S. Census Bureau, Census 2000

From the perspective of both prospective Park residents and residents of the adjacent community, the proposed action would not pose disproportionately high and adverse public health or environmental effects on minority and low-income populations. The availability of Federal assistance, including temporary housing for displaced individuals, is consistent with EO 12898. All forms of FEMA disaster housing assistance are available to any affected household that meets the conditions of eligibility, demographics are not among the eligibility requirements.

The specific demographics of Park occupants are not available at this time because specific individuals or families are in the process of being identified for this park. However, the demographic makeup of the future Park residents is expected to be similar to the community as a whole. Further, the availability of temporary housing would result in a positive impact to displaced individuals, regardless of whether they are minority and/or low income.

## **J. Public Involvement**

Public involvement was performed in compliance with NEPA, FEMA's regulations implementing NEPA at 44 CFR 10.9(c), and Executive Order 12898. A Public Notice was published in the American Press between November 17 and 19, 2005. Due to the emergency nature of this action, the public comment period was brief – November 17 to November 19, 2005. Written comments on the Draft EA and Finding of No Significant Impact (FONSI) were faxed to FEMA's Joint Field Office in Baton Rouge at (225) 346-5848; and verbal comments were accepted at (225) 376-5270 and TTY for hearing or speech-impaired at 800-462-7585; between 8:00 A.M. and 5:00 P.M. The Draft EA and FONSI were available for public review at the Central Branch Public Library at 301 West Claude Street, Lake Charles, Louisiana, 70605 and the FEMA Disaster Recovery Center (DRC) located at the Leadership Center, 1701 Ryan Street, Lake Charles, Louisiana 70601. The library hours are 8:30 AM to 9:00 PM, Monday through Thursday, 8:30 AM to 6:00 PM on Friday. The DRC hours are 9:00 AM to 7:00 PM, 7 days a week. The Draft EA and FONSI were also made available for viewing and download from FEMA's website at <http://www.fema.gov/ehp/docs.shtm>.

## **K. References**

Federal Emergency Management Agency (FEMA). 1998. Flood Insurance Rate Map (FIRM). Community Panel 2200037 0400D.

Fluor Enterprises. 2005. Site Design for Port of Lake Charles Industrial Site Temporary Housing Site. November 12, 2005.

U.S. Bureau of the Census (Census). 2005. American Factfinder. <http://www.census.gov>. Website accessed November 12, 2005.

U.S. Geological Survey. 2005. The National Map. U.S. Fish and Wildlife Service National Wetland Inventory Map. <http://nationalmap.gov/>. Website accessed October 29, 2005.

**L. Figures**

Figure 1: Project Location

Figure 2: Site Location

Figure 3: Preliminary Site Plan

Figure 4: Photographs

**Attachment 1. Hazardous Materials Database Search**

**Attachment 2. Finding of No Significant Impact**